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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,109	02/26/2004	Joung Won Woo	041501-5497-01	1849
9629	7590	04/04/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			DI GRAZIO, JEANNE A	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

M.A

Office Action Summary

Application No.

10/786,109

Applicant(s)

WOO ET AL.

Examiner

Jeanne A. Di Grazio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Feb. 26, 2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

Priority to Korean Patent Application No. 2001-10775 (March 2, 2001) is claimed.

Division of application No. 10/085,096 (filed March 1, 2002) now USPN 6,737,289.

Preliminary Amendment

Applicant's Preliminary Amendment of February 26, 2004 canceling claims 6-25 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,907,379 (to Kim et al.) in view of United States Patent 6,678,018 B2 (to Park et al.).

As to claim 1, Kim teaches and discloses with reference to Figure 6, first (1) and second (2) substrates, a plurality of metal lines (gate lines 10 and data lines 40) on the first substrate (1) wherein the metal lines (gate lines 10 and data lines 40) are formed of a transparent conductive film at least at portions where the metal lines (gate lines 10 and data lines 40) cross one another (See Column 3, Lines 30-32, Column 4, Lines 19-20 and Column 6, Lines 28-33). Although not enumerated, there is a liquid crystal layer between the first (1) and second (2) substrates.

Kim does not appear to explicitly specify a photo-hardening sealant between the first and the second substrates.

However, Park teaches and discloses a thin film transistor array substrate for a liquid crystal display and a method for fabricating the display (Title, entire patent).

In Park, a sealant of thermal hardening resin is printed onto a substrate in order to attach top and bottom substrates such that the substrates are spaced apart from each other with a predetermined distance (Column 6, Lines 59-63).

Park is evidence that ordinary workers in the field of liquid crystals would have found the reason, suggestion and motivation to include a photo-hardening sealant into a liquid crystal display to maintain a predetermined distance between substrates (Id.).

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Kim in view of Park for a predetermined distance between substrates and to seal in liquid crystal material.

As to claim 2, as noted, Kim teaches gate lines (10) and data lines (40) in a display region as well as gate pads (48) and data pads (47) (Figures 4-8).

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,907,379 (to Kim et al.) in view of United States Patent 6,678,018 B2 (to Park et al.) and further in view of United States Patent 5,488,498 (to Fujii et al.).

As to claims 3-5, Kim does not appear to explicitly specify a plurality of pad links connecting gate lines and gate pads and data lines and data pads where at least a portion of the pad links is formed of a transparent conductive film.

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Fujii teaches and discloses a liquid crystal display with particular contacts for supplying counter electrode potential (Title, entire patent).

In Fujii, electrode extensions extend beyond a substrate periphery (Figure 5) to uniformly drive a transparent counter electrode and to provide better display quality with high definition (Column 3, Lines 1-8).

Fujii is evidence that ordinary workers in the field of liquid crystals would have found the reason, suggestion and motivation to include pad links in order to provide better display quality with high definition (Column 3, Lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Kim in view of Fujii for better display quality with high definition.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (571)272-2289.


The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeanne Andrea Di Grazio
Patent Examiner
Art Unit 2871

JDG


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER